

**Alkaline fuel cell comprising an anode comprising aluminium and zinc  
and method for producing one such anode.**

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An alkaline fuel cell comprises at least one electrolyte having an anode disposed thereon. The anode is formed by a stack of a first thin layer and a second thin layer disposed between the electrolyte and the first thin layer.

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The first thin layer consists of aluminium or an aluminium alloy whereas the second thin layer preferably consists of zinc or a zinc alloy. The anode of the alkaline fuel cell is preferably produced by depositing the second thin layer designed to come into contact with the electrolyte, by physical vapor deposition, on a substrate formed by the aluminium or aluminium alloy first

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thin layer.